IN THE CLAIMS

Please amend the claims as follows:

1.-10. (Canceled)

11. (Currently Amended) A method for control of operation of a nitrogen oxides trap for an internal combustion engine running on a lean mixture, wherein purging of the nitrogen oxides trap is commanded periodically, and a first oxygen sensor is disposed in an exhaust pipe downstream from the nitrogen oxides trap, the method comprising:

observing evolution of a meaningful signal representative of a signal delivered by the first oxygen sensor; and

using an increase of the meaningful signal from a first plateau of substantially constant level, reached following a variation subsequent to a changeover of the engine from running on a lean mixture to running on a rich mixture, to a second plateau of substantially constant level as an indicator to command an end of purging.

12. (Previously Presented) A method according to claim 11, wherein a second oxygen sensor disposed upstream from the nitrogen oxides trap is additionally used to deliver a reference signal, relative to which the evolution of the signal delivered by the first oxygen sensor is compared to deliver the meaningful signal.

13. (Previously Presented) A method according to claim 11, wherein the increase of the meaningful signal is detected by applying filtering of a first derivative of the meaningful

signal and by comparing the filtered first derivative with a predetermined threshold.

14. (Previously Presented) A method according to claim 12, wherein the increase of the meaningful signal is detected by applying filtering of a first derivative of the meaningful signal and by comparing the filtered first derivative with a predetermined threshold.

15. (Previously Presented) A method according to claim 11, wherein the increase of the meaningful signal is detected by applying filtering of a second derivative of the meaningful signal and observing passage of the filtered second derivative through zero in decreasing threshold.

16. (Previously Presented) A method according to claim 12, wherein the increase of the meaningful signal is detected by applying filtering of a second derivative of the meaningful signal and observing passage of the filtered second derivative through zero in decreasing threshold.

17. (Previously Presented) A method according to claim 11, wherein the increase of the meaningful signal is detected by taking a difference between an instantaneous value of the meaningful signal and a sliding mean of the meaningful signal, and by comparing the difference with a threshold.

18. (Previously Presented) A method according to claim 12, wherein the increase of

the meaningful signal is detected by taking a difference between an instantaneous value of the

meaningful signal and a sliding mean of the meaningful signal, and by comparing the

difference with a threshold.

19. (Previously Presented) A method according to claim 11, wherein the increase of

the meaningful signal, for a lambda sensor, is detected by comparing a voltage value

delivered by the first oxygen sensor with a predetermined threshold.

20. (Previously Presented) A method according to claim 12, wherein the increase of

the meaningful signal, for a lambda sensor, is detected by comparing a voltage value

delivered by the first oxygen sensor with a predetermined threshold.

21. (Previously Presented) A method according to claim 11, wherein the first oxygen

sensor is chosen from among sensors of a sensor of lambda type, proportional oxygen sensor,

nitrogen oxides detector, in which the oxygen-concentration measuring function is used.

22. (Previously Presented) A method according to claim 12, wherein the first oxygen

sensor is chosen from among sensors of a sensor of lambda type, proportional oxygen sensor,

nitrogen oxides detector, in which the oxygen-concentration measuring function is used.

23. (Previously Presented) A method according to claim 22, wherein the first and

second oxygen sensors are of different types.

24. (Currently Amended) A device for control of an operation of a nitrogen oxides trap for an internal combustion engine running on a lean mixture, for use of ~~the method according to claim 11~~ a method for control of operation of the nitrogen oxides trap, the engine being equipped with an exhaust line containing a nitrogen oxides trap, the device comprising:

a first oxygen sensor disposed on an exhaust line downstream from the nitrogen oxides trap; and

calculating means for determining an increase of a meaningful signal representative of the signal delivered by the first oxygen sensor from a first plateau of substantially constant level, reached following initiation of a purging operation, to a second plateau of substantially constant level and using the increase as an indicator to command an end of purging.

25. (Previously Presented) A device according to claim 24, further comprising a second oxygen sensor disposed upstream from the nitrogen oxides trap and connected to the calculating means to deliver a reference signal thereto.